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Site A.L. Taylor Governor
Break 17.8

COMMONWEALTH OF KENTUCKY

DEPARTMENT FOR NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION

BUREAU OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS MATERIAL
AND WASTE MANAGEMENT
FRANKFORT, KENTUCKY 40601

MEMORANDUM

August 28, 1979

TO: Jack Wilson, Deputy Commissioner Bureau of Environmental Protection

THROUGH: Roger Blair, Director

Division of Hazardous Material and Waste Management

FROM: Daniel R. Dolan, Chief

Hazardous Material Management Section

SUBJECT: Immediate and Long-Range Proposals for A. L. Taylor Site

The Taylor site is in need of some immediate remedial work to correct minor difficulties in the treatment system that are the result of siltation in the drainage cuts and the settling pond. The actual surface is relatively free of heavy undergrowth but could use some weed cutting to facilitate the use of equipment and access to the drums if required by additional clean-up efforts or emergency activities. The drums will have to be re-marked with the code letters describing the contents. Sunlight and weather have made the "S", "L", and "E" (corresponding to the phase or absence of contents) difficult to read. The contents data may be very useful in subsequent parts of any significant remedy to the site.

The treatment system is in need of a thorough cleaning. Carbon particles are building up in the filter weirs and accumulations of algae are evident. The "spent" carbon charge should be disposed of by incineration now that ample evidence is available indicating that PCB's are not present at levels necessitating more careful handling methods.

As an adjunct to the general maintenance on the treatment system, additional analysis should be done by a competent subcontractor on the performance of the system. This data is necessary because we presently operate the system "blind", i.e., with no performance controls whatsoever. When the activated carbon charge should be replaced is not even an educated guess without thorough input information on the system.



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Note, that from the analytical results, treatment system effluent can imply the following:

- 1. The organic liquids on the site are almost entirely paint manufacturing related solvents non-chlorinated ketones and alkylaromatics, all easily incinerated.
- 2. Very little chlorinated material is entering the plant so it is likely that very little chlorine will show up in the liquids on the site.
- 3. No detectable levels of particularly dangerous materials have been found at the treatment plant and there are no confirmed reports of those types of materials ever having been taken to the site.

These data imply that clean-up activities will not involve extreme personal danger or extremely expensive disposal methods.

Screening or overhead shelter should be constructed. The present exposure of the drums to daily heating and nighttime cooling has the effect of weakening the drum heads, causing bung hole fatigue, and expanding the contents so that leaks and spills occur with regularity. A shelter system for the drums would also be advantageous if wintertime sampling or handling was necessary.

The site should be protected by fencing equivalent to RCRA requirements if continued storage is necessary. The site should be appropriately labeled as one which contains hazardous materials and all unauthorized persons shall keep out. At present, access to the site, the treatment equipment, and several pits and piles of empty and full drums may be had by simply walking through the woods onto the back of the property. There is a great potential for injury of any third party ignorant of the contents of the drums. The potential for fire or explosion as a result of smoking or target practice at the site is also a significant danger at the present time.

The long term solution would consist of several activities which may proceed concurrently. One, all pumpable liquids should be batched for sampling and evaluated for thermal destruction. Second, the crushed and empty barrels should be inspected to "insure" that they are empty and then should be landfilled. Special permission would not be necessary for such disposal since current practice and even the proposed federal regulations envision disposal of empty drums without precautions other than to ascertain that they are empty. The analytical results from liquid batching and preliminary sampling of solid filled drums may provide ample assurance that the small amount of solids in the "empty" drums are non-hazardous. The third activity would be close inspection of the remaining solids and grouping by physical characteristics. An evaluation of like types of materials would

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provide ample information to determine the efficiency of disposal in one of the landfills in the Commonwealth. All grouping and batching activities with solids must be done with the idea in mind that analytical costs are high for general organic unknown determinations. A sampling and testing program for the solids cannot be designed without physical inspection of each solid. Like colored or marked drums are an insufficient guarantee of anything more than the color or marking. Significant assistance might be obtained from the generators of the waste as well as analytical facilities if they agree to assist in the clean-up.

Finally, the site surface should be scarified by heavy equipment, pits and sludge accumulations should be removed or chemically fixed, and the site reseeded to control erosion.

The heavy metal content of grasses grown on the site should be monitored and it is recommended that animals should not be allowed to graze on the property until an in-depth study of heavy metals and organic solvents and solids in the soil is performed. Harvesting of any crops or animal feed from the site should also abe prohibited until further data is available on heavy metal accumulation.

DD/jw